

EMISSIONS CHARACTERIZATION IN THE CONTAINED UNDERGROUND DEMILITARIZATION LABORATORY AT THE NEVADA TEST SITE C. A. Velsko, B. E. Watkins*, C. O. Pruneda*, Isotope Sciences Division, *Energetic Materials Center, Lawrence Livermore National Laboratory, 7000 East Avenue, Livermore, CA 94550

The US Departments of Defense and Energy (DoD and DOE) have established a Joint Demilitarization Technology (JDT) Program to demonstrate and validate technologies for resource recovery and recycling, as well as, alternative destruction or treatment technologies as appropriate to specific conventional stockpile segments. X Tunnel at the DOE's Nevada Test Site is the facility for emissions characterization from detonation of conventional munitions and burning of rocket motors. We conducted a series of four detonations of M107, 155mm projectiles, from December 1996 through March 1997. A series of rocket motor burns is planned for May-June 1997. Standard DoD procedures for open detonation of ordnance and open burn of rocket motors were followed in order to establish baseline and scaling factors for the emissions. Measurements inside the chamber included pressures, temperatures and relative humidity. Samples were collected for gas, organic, metal and particulate analyses. Results and implications for developing alternative destruction techniques will be presented.

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ABSTRACT. Please be BRIEF—150 words maximum if possible. Title of paper should be ALL CAPS; author(s) listed by first name, middle initial, last name; indicate address w/zip code. SINGLE SPACE, BLACK INK.

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